

is unfounded and, on average, test weighing gives a result insignificantly different from the true value.

The fact that the slope is rather shallow, although not significant, is of interest; however, it may well be related to the poor accuracy of the scales used. A repeat of the study using an electronic balance ought to lead to a slope appreciably nearer unity.

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Dr Whitfield and co-workers comment:

It is clear that the accuracy of the weighing procedure could be considerably improved by using an electronic balance to record baby weight. However, as mentioned on page 920 of the paper the purpose of the study was to investigate 'routine test weighing in the clinical context, rather than as an optimal research procedure'.

The regression analysis undertaken considered the prediction of 'exact' FW from measurement on TW. Information on FW was required given an observed TW; this was the appropriate direction of the regression equation from a practical standpoint. It was not necessary that the independent variable be measured without error when the analysis was to be considered as predicting a measurement Y conditional on the X as observed. Conclusions were therefore based on the regression of FW on TW and the regression of TW on FW was not considered relevant.

Timing of neonatal cerebroventricular haemorrhage with ultrasound

Sir,

De Crespigny *et al.*¹ described the timing of neonatal periventricular haemorrhage using real time ultrasound scanning. Their results demonstrated periventricular haemorrhage within 6 hours of birth in 71% of 34 infants. These conflict with our results and with those of Levene *et al.*² and Hope *et al.*³

During the last year we have performed daily ultrasound scans on 290 infants in our unit using an ATL real time 850A scanner with 5 MHz transducers. One hundred and eighty-one infants were less than 1500 g birthweight. Initial scans were performed within 2 hours of birth in inborn infants, and immediately after transfer if born elsewhere in the region. Periventricular haemorrhage occurred in 97, of which 90 could be timed to within a 12-hour period; 80 of these occurred in infants of very low birthweight. Seventeen haemorrhages began before 12 hours after birth, and 13 between 12 and 24 hours. A further 28 occurred between 24 and 48 hours, and 32 after 48 hours. Of 36 outborn infants who bled, haemorrhage occurred after transfer in 30. These figures agree generally with those of Levene *et al.*²

Often a preceding precipitating event could be linked temporarily to the development of periventricular

Table *Precipitating factors observed to precede periventricular haemorrhage in 90 infants*

Hypercapnia/acidosis	22
Preterminal event (multifactorial)	16
Pneumothorax	14
ETT problem	12
Birth trauma/asphyxia	12*
No observed cause	12

*3 not transferred until >12 hours old.

haemorrhage (Table). Birth itself could be directly linked to periventricular haemorrhage in the first 12 hours in only 9 infants. Delivery was unmonitored or non-vertex in 7 of them. The other haemorrhages occurring in the first 12 hours were multifactorial preterminal events.

Timing of haemorrhage related to increasing birthweight and maturity in our infants. The mean (\pm SD) birthweight of infants bleeding before 12 hours was 0.91 ± 0.23 kg, mean gestation $27\frac{1}{2}$ weeks. In contrast infants bleeding after 48 hours were larger and more mature (1.25 ± 0.4 kg, mean gestation $29\frac{1}{2}$ weeks).

In 12 of 38 infants sustaining a large (Papile's grade 3-4⁴) haemorrhage, extension was observed at least 24 hours after the initial bleed. Nine of these infants died, reflecting their underlying severe illness.

We cannot explain the differences in the British results compared with those of de Crespigny but perhaps there were differences in the populations. Perhaps celestial orientation has previously unrecognised effects?

References

- 1 De Crespigny L Ch, Mackay R, Murton L J, Roy R N D, Robinson P H. Timing of neonatal cerebroventricular haemorrhage with ultrasound. *Arch Dis Child* 1982; **57**: 231-3.
- 2 Levene M I, Wigglesworth J S, Dubowitz V. Cerebral structure and intraventricular haemorrhage in the neonate: a real-time ultrasound study. *Arch Dis Child* 1981; **56**: 416-24.
- 3 Hope P L, Thorburn R J, Stewart A L, Reynolds E O R. Letter: Prevention of intraventricular haemorrhage by phenobarbitone. *Lancet* 1981; **ii**: 527.
- 4 Papile L A, Burstein J, Burstein R, Koffler H. Incidence and evolution of subependymal and intraventricular hemorrhage; a study of infants with birth weight less than 1500 gm. *J Pediatr* 1978; **92**: 529-34.

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Munchausen syndrome by proxy and pseudo-epilepsy

Sir,

Since writing the article published earlier this year¹ many more cases have been uncovered in which mothers have

consistently given fraudulent clinical histories and fabricated signs so causing their children needless clinical investigations and treatments. More than 60 cases have come to light in England and Scotland alone; I am grateful to the paediatricians and others who have kept me informed.

An unexpected consequence of the national publicity which resulted from the article in this journal has been that a number of parents have contacted me directly wishing to confess that they have been indulging in Munchausen syndrome by proxy, or alleging that their spouse is. Checking their stories and arranging appropriate help has been a difficult and sensitive task. From it I have learnt that Munchausen syndrome by proxy is more common than even I imagined, and that the bizarre fabrications in which mothers may indulge are limitless. However, by far the most common fabrication in this group of parents has been a long false story of seizures in their child—that is epilepsy. Such fabrication is easy to maintain since doctors rarely see a child having a seizure. Moreover the story is particularly likely to

achieve hospital admission or referral to a specialist. It is noteworthy that most of these mothers do not have a nursing or medical background: ex-nurses seem to invent more exotic diseases than epilepsy. One lesson to be learnt is that paediatricians should take the opportunity to check the veracity of any seizure which is alleged to have occurred at school or in the presence of a third party who can act as an independent witness. This is particularly necessary for any child who seems to have an unusual form of epilepsy, or one who is allegedly unresponsive to treatment. A fuller report of these cases will follow.

Reference

- ¹ Meadow R. Munchausen syndrome by proxy. *Arch Dis Child* 1982; 57: 92—8.

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Book reviews

Ultrasound in Pediatrics. Edited by J O Haller and A Shkolnik. Volume 8 in Clinics in Diagnostic Ultrasound Series. (Pp. 306 incl. index; illustrated+tables. £15.00 hardback.) Churchill Livingstone: New York. 1981.

Twenty-three authors, 15 chapters, and 264 pages cover almost everything from the neonatal brain to the scrotum (excluding echocardiography). Many of the authors are well known, some particularly so for their contributions to paediatric ultrasound; therefore one would expect this book to be a flagship of North American paediatric ultrasound but, unfortunately, it falls far short of such great expectations. Most of the images are poor but as the standard of production is high this is not the publisher's fault.

Similar topics are discussed in several chapters and this repetition should have been eliminated by the editors. The chapters on antenatal diagnosis, the chest, the pelvis, and the scrotum are all very good. 'High resolution ultrasound' surprisingly proved to be a little gem and dealt with biliary atresia more efficiently than the major chapter on the subject; it is the only chapter in which visualisation of the normal newborn biliary tree is mentioned. I disagree with the suggested measurement of the bile duct lumen as 3 mm in the child; up to 1.5 mm in the

newborn and 2 mm in the child up to age 10 would be more accurate.

Although the chapter on the neonatal brain is good it is weakened by poor images and lack of detail on periventricular haemorrhage, and the chapter on the liver and digestive system is disappointing and cannot be recommended as a good source of information. The chapters on the urinary tract were well written, but the illustrations were either bad or indeterminable. For example, figure 8.14 was supposed to be of acute tubular necrosis but it could be renal venous thrombosis; 8.15 may be glycogen storage disease but is not the picture one would expect to be used to illustrate this condition; 8.18 was supposed to demonstrate the right adrenal but in fact indicates the right crus of the diaphragm!

This book is good in parts but regrettably its many weaknesses will prevent it from becoming a leading text on the subject.

C METREWELI

Shorter notices

Common Symptoms of Diseases in Children, seventh edition. By R S Illingworth. (Pp. 367 incl. index; tables. £9.50 hardback.) Blackwell: Oxford. 1982.

The latest edition of this popular book contains many revisions but the basic

structure is unchanged. At least 100 symptoms are carefully considered and, where appropriate, a list of the more important causes given. Although rare causes of the symptom are included care has been taken to stress the more likely common causes.

Textbook of Paediatric Nutrition, second edition. Edited by D McLaren and D Burman. (Pp. 464 incl. index; illustrated + tables. £16.00 paperback.) Churchill Livingstone: Edinburgh. 1982.

It is six years since this was first published. The latest edition contains important new sections and, in particular, deals with some of the more topical and contentious aspects of nutrition; this is achieved without interfering with its sensible and comprehensive approach. The price is modest considering the size and scope of the book.

Understanding Child Abuse. Edited by D M Jones. (Pp. 299 incl. index. £2.95 paperback.) Hodder & Stoughton: Sevenoaks. 1982.

This small book is a useful introduction to child abuse for inexperienced paediatricians. Descriptions of the social services and the various laws relating to children are admirably clear, but their inclusion limits the book to a British readership.